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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/664,616

09/19/2003

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EXAMINER

CLOUD, JOIYA M

ART UNIT

PAPER NUMBER

2144

MAIL DATE

DELIVERY MODE

01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/664,616

Applicant(s)

GOLDHOR ET AL.

Examiner

Joiya M. Cloud

Art Unit

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/24/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the application filed on 10/24/2007. Claims 1-39 are pending in the Application representing a Method and apparatus for continuous playback of media. Claims 19-39 are newly added.

2. ***IDS***

Acknowledgment is made to the applicant's submission Information Disclosure Statements, filed 10/24/2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Firestone et al. (U.S. Patent No. 6,247,072 B1, hereinafter Firestone) in view of Crow et al. (U.S. Patent No. 6,262,724 B1, hereinafter Crow).

As per claim 1, Firestone discloses the invention substantially as claimed. Firestone discloses a client apparatus for preparing streaming media received over a non-deterministic delay network for playback or distribution which comprises: a buffer which stores data corresponding to the streaming media (**Abstract, col. 2, lines 12-25**); a time-scale modification system that time-scale modifies data output from the buffer at a time-scale modification playback rate (**col. 2, lines 12-25, col. 4, lines 2-5**) ; a rate determiner that determines the time-scale modification playback rate over an interval to control an amount of data in the buffer (**Abstract, col. 2, lines 26-50**).

However, Firestone does not explicitly teach a user interface which receives a user requested time-scale modification playback rate.

Crow teaches a user interface which receives a user requested time-scale modification playback rate (**Figure 4 and col. 3, lines 35-41**).

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporate Firestones's teachings to the teachings of Crow, for the purpose of displaying the information in portion which is "changed according to the rate which is dependent upon the input" (**col. 3, lines 35-41**).

As per claim 2, Firestone-Crow further discloses wherein the rate determiner determines the time-scale modification playback rate utilizing the user requested time-scale modification playback rate (**Crow: col. 5, lines 63-67**).

As per claim 3, Firestone-Crow further discloses wherein the user interface further comprises a graphical interface (**Crow: Abstract, col. 3, lines 35-41**).

As per claim 4, Firestone-Crow further discloses wherein the graphical interface further displays one or more of the user requested time-scale modification playback rate, and the time-scale modification playback rate (**Crow: Figures 7b and 8b**).

As per claim 5, Firestone-Crow further discloses a client apparatus wherein the graphical interface further displays a range of time-scale modification playback rates which are determined to provide uninterrupted playback (**Crow: Figures 7b and 8b**).

As per claim 6, Firestone-Crow wherein the rate determiner determines the time-scale modification playback rate as a non-linear function of the amount of data (**Firestone: col. 3, lines 40-45 and col. 4, lines 57-col. 5 lines 1-5**).

As per claim 7, Firestone-Crow teaches a method for preparing streaming media received over a non-deterministic delay network at a client device for playback or distribution which receiving the streaming media at the client device; determining a measure of an arrival rate and a measure of consumption rate of the streaming media (**Firestone: Abstract and col. 3, lines 37-41**); determining a measure of mismatch between the arrival measure and the consumption measure; and utilizing time-scale modification to mitigate effects of the mismatch (**Firestone: col. 4, lines 16-18**); wherein the arrival measure is determined as a function of an arrival rate of data in a buffer (**Firestone: col. 3, lines 40-45 and col. 4, lines 57-col. 5 lines 1-5**); and the consumption measure is determined as a function of a user rate of data by a playback system or a distribution system (**Firestone: col. 3, lines 40-45 and col. 4, lines 39-col. 5 lines 1-5**).

As per claim 8, claim 8 is substantially the same as claim 7 and thus rejected using the same rationale. Furthermore, regarding wherein the arrival rate is determined using time-stamps for arriving data (**Firestone: Figure 3, Figure, 6 and col. 6, lines 36-40**).

As per claim 9, claim 9 is substantially the same as claim 8 and thus rejected using similar rationale.

As per claim 10, claim 10 is substantially the same as claim 9 and is thus rejected using the same rationale. Furthermore, regarding utilizing time-scale modification to mitigate underflow or overflow in the buffer, or disruption in playback and providing an indication of a current time-scale modification playback rate to the user (**Firestone: col. 3, lines 57-60 and col. 3, lines 37-41**).

As per claim 11, which further comprises steps of: providing an indication of a user requested time-scale modification playback rate (**Crow: col. 12, lines 53-60 and Firestone: col. 5, lines 10-15**).

As per claim 12, wherein the step of playing back comprises associating a time-scale modification playback rate with each entry in a playback buffer queue (**Firestone: col. 3, lines 40-45 and col. 4, lines 39-col. 5 lines 1-5**).

As per claim 13, wherein the indication comprises a function of recent time-scale modification playback rates (**Crow: col. 12, lines 53-60 and Firestone: col. 5, lines 12-26**).

As per claim 14, wherein the step of utilizing comprising ignoring or modifying the user input time-scale modification playback rate when it would interfere with providing continuous playback (**Firestone: Abstract and col. 3, lines 37-21**).

As per claim 17, claims 17 is substantially the same as claim 15 and is thus rejected using the same rationale. Furthermore regarding wherein the minimum time-scale modification playback rate is determined as a function of the arrival measure, the consumption measure, an amount of data in the buffer, and the time interval (**Firestone: col. 3, lines 37-67**).

As per claim 18, Firestone-Crow teaches a method for playback of streaming media received over a non-deterministic delay network at a client device which comprises steps of: receiving the streaming media at the client device, which client device includes a CPU (**Firestone: col. 1, lines 30-35**); playing back the streaming media; determining a measure of CPU availability (**Firestone: col. 2, lines 5-25 and col. 1, lines 32-34**); determining a time-scale modification playback rate as a function of the measure of CPU availability (**Firestone: col. 1, lines 32-34**); and utilizing time-scale modification to prepare the streaming media for playback (**Firestone: col. 2, lines 5-25**).

As per claim 18, Firestone-Crow teaches a method for playback of streaming media received over a non-deterministic delay network at a client device which comprises receiving the streamlining media at the client device, which client device includes a CPU; playing back the streaming media; determining a measure of CPU availability; determining a time-scale modification playback rate as a function of the measure of CPU availability; and utilizing time-scale modification to prepare the streaming media for playback (**Firestone: col. 1, lines 32-34**

and col. 2, lines 5-25).

As per claim 19, Firestone-Crow teaches a method of presenting streaming media comprising determining a short-term playback system media data buffer fill rate (**Firestone: col. 4, lines 19-25**); determining a short-term playback system media data consumption rate; determining a short-term sustainable playback rate that balances the short-term playback system media data buffer fill rate and the short-term playback system media data consumption rate (**Firestone: col. 4, lines 19-25**); determining a time-scale modification rate no greater than the sustainable playback rate; and setting a playback system presentation rate to the time-scale modification rate (**Firestone: col. 7, lines 54-60**).

As per claim 20, Firestone-Crow teaches a method of playback of media data comprising receiving media data; determining a short-term network bandwidth estimate (; determining a playback rate that reduces a media data playback rate to be less than or equal to the short-term network bandwidth; and setting a current media playback system presentation rate to the playback rate (**Firestone: col. 1, lines 32-34 and col. 2, lines 5-25**).

As per claim 21, Firestone-Crow teaches a method of receiving the media data over an interval at a rate that is lower than a rate for a previous interval (**Firestone: col. 4, lines 57-62, col. 2, lines 40-44 and col. 4, lines 35-38**).

As per claim 22, teaches a method wherein the media data comprises an entire presentation (**Firestone: col. 7, lines 54-60**).

As per claim 23, Firestone-Crow teaches a method wherein receiving comprises receiving the media data without modification at a reduced rate over an interval, the reduced rate being lower than a rate for another interval (**Firestone: col. 4, lines 57-62**).

As per claim 24, Firestone-Crow teaches a method wherein receiving comprises: receiving the media data over the interval with increased intervals between portions of the media data (**Firestone: col. 4, lines 57-62, col. 2, lines 40-44 and col. 4, lines 35-38**).

As per claim 25, Firestone-Crow teaches a method further comprising receiving the media data unmodified; and determining includes reducing the short-term sustainable playback system presentation rate (**Firestone: col. 4, lines 57-62 and col. 4, lines 19-25**).

As per claim 26, Firestone-Crow teaches a method that further comprises time-scale modifying audio to increase a presentation length of a unit of audio content; linking a current media presentation time to the time-scaled audio; and basing a presentation time of all non-audio media content on the current media presentation time.

As per claim 27, Firestone-Crow teaches a method wherein determining the short-term sustainable playback rate includes using a user-requested rate (**Firestone: col. 4, lines 35-38.**

As per claim 28, Firestone-Crow teaches wherein maximum playback rates may be slower than the user-requested rate (**Firestone: col. 3, lines 61-65).**

As per claim 29, Firestone-Crow teaches a method of presenting streaming media data comprising estimating a short-term available network bandwidth; determining a presentation rate no larger than the short-term available network bandwidth (**Firestone: col. 7, lines 54-60**); determining a time-scale modification rate no greater than the presentation rate; and setting a media playback system presentation rate to the time-scale modification rate (**col. 6, lines 12-21**).

As per claim 30, Firestone-Crow teaches a method wherein determining a presentation rate comprises determining a maximum presentation rate compatible with the short-term available network bandwidth (**Firestone: col. 3, lines 61-65**).

As per claim 31, Firestone-Crow teaches a client apparatus for preparing streaming media received over a non-deterministic delay network for playback or distribution which comprises: a buffer which stores data corresponding to the streaming media; and a rate determiner that determines a time-scale modification playback rate over an interval in response to information concerning the data in the buffer; and transmits a network time-scale modification playback rate over a network (**Firestone: Abstract and col. 4, lines 1-67**).

As per claim 32, Firestone-Crow teaches the client apparatus which further comprises a user interface which receives a user requested time-scale modification playback rate; wherein the rate determiner determines a time-scale modification playback rate over an interval in response to the information and the user requested time-scale modification playback rate (**Firestone: Abstract and col. 4, lines 1-67**).

As per claim 33, Firestone-Crow teaches the client apparatus wherein the information is an amount of data in the buffer (**Firestone: Abstract and col. 3, lines 43-52**).

As per claim 34, Firestone-Crow teaches client apparatus wherein the information is a measure of mismatch between a measure of an arrival rate and a measure of a data consumption rate of the received streaming media (**Firestone: col. 4, lines 11-25**).

As per claim 35, Firestone-Crow teaches the client apparatus wherein the arrival measure is a function of an arrival rate of data in the buffer; and the consumption measure is a function of a use rate of data from the buffer (**Firestone: col. 2, lines 11-25**).

As per claim 36, Firestone-Crow teaches the client apparatus wherein the arrival rate is determined using time-stamps for arriving data (**Firestone: col. 7, lines 11-22**).

As per claim 37, Firestone-Crow teaches the client apparatus wherein the arrival rate is determined using data arrival times and data packet sizes (**Firestone: col. 1, lines 63-65**).

As per claim 38, Firestone-Crow teaches the client apparatus wherein the network time-scale modification playback rate is the time-scale modification playback rate (**Firestone: Abstract**).

As per claim 39, Firestone-Crow teaches the client apparatus which further comprises a decoder that, in response to data from the buffer and a data time-scale modification playback rate, time-scale modifies the data; wherein the network time-scale modification playback rate is 1 or the time-scale modification playback rate; and the data time-scale modification playback rate is the time-scale modification playback rate or 1, respectively (**col. 3, lines 46-50**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joiya Cloud whose telephone number is 571-270-1146. The examiner can normally be reached Monday to Friday from on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3922.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC

William C. Vaughn

Supervisory Patent Examiner

January 22, 2008


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